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A NEW SUBSPECIES OF *LEIOCEPHALUS*STICTIGASTER SCHWARTZ FROM CENTRAL CUBA

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I (1959) have recently described the species Leiocephalus stictigaster from western Cuba and the Isla de Pinos. At the time of this description, I mentioned (op. cit.:110) two lizards from Bayamo, Oriente, which were tentatively considered to represent L. cubensis cubensis, despite the fact that these two individuals agreed rather well with my concept of L. stictigaster. The occurrence of this species as far east as Oriente left a distributional hiatus of considerable extent, since the easternmost Cuban record was in central Pinar del Río Province.

In the summer of 1959, in the company of Ronald F. Klinikowski and Barton L. Smith, I collected on the north coast of Camagüev Province, at Plava Santa Lucía: this locality lies between the Bahía de Nuevitas on the west and the Oriente border on the east. At this locality we took a long series of L. stictigaster. Although both L. carinatus and L. macropus occur at Playa Santa Lucía, stictigaster is the most common of the three and is the only member of the genus which occurs along the beach itself. This locality lies within the known range of L. c. cubensis (see map, op. cit.:99), although we took no specimens of *cubensis* near Santa Lucía. In addition to our series, I have been permitted to examine a number of these lizards taken at Santa Lucía by Ernest E. Williams and Rudolfo Ruibal. Their collection also includes a single individual from the serpentine savanna ca. 20 kilometers north of Camagüey city. Although this lizard appears distinct from the Playa Santa Lucía lot, it agrees well with the two specimens previously reported from Bayamo. Additional material from eastern Camagüey and western Oriente will undoubtedly show

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that another race of *stictigaster* inhabits that area. The lizards from Playa Santa Lucía are distinct from the remaining four races of *L. stictigaster*, and for them I propose the name

Leiocephalus stictigaster lucianus, new subspecies

Type: American Museum of Natural History (AMNH) 83583, an adult male, from Playa Santa Lucía, Camagüey Province, Cuba, taken 30 June 1959 by Ronald F. Klinikowski. Original number 7298.

Paratypes: AMNH 83554–82, same locality as type, 29 June 1959, R. F. Klinikowski, A. Schwartz, B. L. Smith; Museum of Comparative Zoology (MCZ) 59211–28, (Playa) Santa Lucía, east of Bahía de Nuevitas, Camagüey Province, Cuba, 24 August 1959, E. E. Williams, R. Molina, R. Ruibal.

Diagnosis: A subspecies of Leiocephalus stictigaster characterized by broad white to tan dorsolateral stripes, dorsal pattern prominently and contrastingly lined longitudinally, the dark dorsal colors ranging from dull tans to brown and black, brown to orange ventral dots on a white to pale yellow ground, and a distinct and persistent black throat pattern on a clear background.

Distribution: Known only from the type locality.

Description of type: An adult male with the following measurements (in mm) and counts: snout-vent length 76, tail (distal quarter regenerated) 119, snout to anterior border of tympanic opening 16.5, head width 13.8, supraocular scales 6/6, loreals 6, temporals 11, enlarged auricular scales 3/4, median head scales 4, prefrontal row complete 3 scales, frontoparietal row complete 5 scales, parietals in contact, semicircles complete, dorsal crest scales occiput to vent 53, dorsal crest scales occiput to axilla 24, scales around one half of body at midbody 23, fourth toe subdigital tricarinate scales 23/24.

Coloration of type: The dorsal coloration of the type is generally dull to darker tan, the pigments arranged in the typical zoned pattern of stictigaster, as follows: Zone 1 is brown and confined to the median crest scales. Laterally, zone 2 is dull tan and rather sharply set off from zone 3, the dorsolateral fields, which are brown with scattered darker brown scales. The dorsolateral fields are again sharply differentiated from zone 4, which is wide and very pale tan, and extends from the posterior edge of the temporals to the proximal portion of the tail, becoming less prominent above hindlimbs. Zone 5 is a rich dark brown, much more saturated than the brown of zone 3; it begins posterior to the eye and continues posterior to the hind limb insertion. There appear to be some longitudinal black dashes in zone 5, but because of the depth of the pigmentation of the ground color, these dashes are not well defined. Zone 6 is white, beginning below the eye and proceeding posterior to the groin; both dorsally and ventrally zone 6 is delimited by irregular black to dark brown markings, which set the zone off from the pigmented areas above and below it. Below zone 6 is an additional longitudinal zone, between the fore and hind limbs, which is brown with scattered black dashes; this lowermost

zone changes rather abruptly to the whitish venter. The dorsal surface of the head is tan with black dots on the snout, the supraocular semicircles, and the posterior head shields. The postorbital blotch is absent, the temporal region having the same brown pigmentation as zone 5, although in the postorbital region the ground color is somewhat lighter and dorsal and ventral black margins of zone 5 are more pronounced than elsewhere. The dorsal surfaces of the limbs are medium tan, spotted with a lighter tan, which is more prominent on the hind limbs than on the fore limbs. The hind limbs also show dark brown dashes on their dorsal surfaces. The dorsal surface of the tail has about ten indistinct chevrons, the more proximal ones being almost obliterated and their position marked only by paired dark brown dots on the tan caudal ground color. The throat is boldly marked on a clear pale yellow ground; there are two black V's, their apices pointed anteriorly, the second of which is incomplete at the midline, and both of which are preceded by a small black bar. Posterior to these are a pair of paramedian black lines which extend onto the chest. The chest itself is marked with black spots and these spots occur as well on the underside of the fore limbs. The remainder of the venter is marked with dark brown (centrally) to orange (peripherally) dots, which may even appear as longitudinally elongate dashes, and which extend as well onto the underside of the thighs and onto the sides of the tail. The underside of the shank is dull white and lacks well-defined spots.

Variation: In snout-vent length, 20 males (type and paratypes) average 63.9 (52–78), 23 female paratypes average 50.3 (41–58). Dorsal crest scales in occiput-vent length (combined data for both sexes) average 51.6 (45–56) and dorsal crest scales in occiput-axilla length average 22.0 (18–29). One half scales are midbody average 23.8 (21–27), loreals 4.9 (3–8), temporals 11.4 (9–14), subdigital tricarinate scales on the fourth toe 24.3 (21–27). The parietals are more often in contact (73%) than not, the supraorbital semicircles are more often complete (72%) than not. All specimens have four median head scales, three prefrontal scales in a complete row, and usually five frontoparietals in a complete row, although counts of four and six occur as well, and two individuals have the frontoparietal row interrupted.

The paratypes include 22 males, of which three are juveniles (snoutvent lengths 37 to 44). All adult and subadult males agree well with the type in coloration and pattern, although some are even more darkly pigmented. The lateral fields often have more prominent black dashes than those of the type, and the dorsal fields at times show more dark blotches than does the type. The postorbital blotch is consistently absent, and the dorsum is always prominently lined, the pale zone 4 involving parts of three scales (one entire scale and halves of two adjacent scales). The ventral ground color ranges in life from white to pale yellow. The throat pattern is essentially that described for the type, but it may show some fragmentation which is not extensive. The most anterior of the throat V's may be preceded by a small transverse black bar, the paramedian lines may be joined to the more posterior of the V's, there may be an additional

pair of paramedian lines adjacent to the central pair; all these variations do not disturb the inherently obvious pattern of the throat. All have the venter dotted with brown, although the three juveniles lack the dots centrally, but have them peripherally. The dorsal surfaces of the hind limbs usually show both tan and dark brown markings, but one or both features may be absent, so that this member may have an unmarked dorsal surface.

Aside from their smaller size, the females present no special features. They resemble the males in all characteristics, even to the throat pattern and heavily spotted venters, although juvenile females, like juvenile males, have few to no dots centrally on the belly.

Comparisons: L. s. lucianus differs from the races stictigaster, sierrae and exotheotus by virtue of its dorsal pattern; in these three subspecies, zone 4 regularly involves one and one-half scales, in contrast to three scales in lucianus. In addition, lucianus has a definite throat pattern and ventral dots; exotheotus may lack ventral dots, and all three western races usually have the throat pattern disintegrated in adults and have some gray clouding on the ground color. L. s. lucianus most closely resembles astictus dorsally; both have a wide zone 4. However, astictus lacks ventral dots, has the parietals usually (73%) not in contact, and has red sides with green dots, whereas lucianus has brown sides without other lateral chromatic markings.

Remarks: L. s. lucianus is known to occur only along the sandy beach at Playa Santa Lucía; in this area it is the most abundant lizard and large numbers were seen daily. That the species does not occur only at this single isolated locality is shown by one specimen (MCZ 59229) from about 20 kilometers north of Camagüey. I hesitate to call this single lizard lucianus, since it appears to be distinctively colored dorsally, has especially heavy dark throat markings, a narrow zone 4, and rather prominent dark markings in the lateral fields. In all these characteristics this specimen agrees well with the two Bayamo lizards referred to previously. It is probable that L. stictigaster has a much wider distribution in eastern Cuba than is currently known, and it should be looked for at least in Camagüey and western Oriente.

LITERATURE CITED

Schwartz, Albert. 1959. Variation in lizards of the *Leiocephalus cubensis* complex in Cuba and the Isla de Pinos. Bull. Fla. State Mus., 4(4): 97–143, 10 figs.